

**APPROVED JULY 2, 2015**

The work session of the Douglas County Board of Commissioners was held on June 18, 2015 in the Kahle Community Center, Rubicon Room, 236 Kingsbury Grade, Stateline, Nevada beginning at 12:00 p.m.

**COMMISSIONERS PRESENT:** Doug N. Johnson, Chairman; Nancy McDermid, Vice Chairwoman; Greg Lynn, Commissioner; Barry Penzel, Commissioner and Steve Thaler, Commissioner.

**STAFF PRESENT:** Justina Caviglia, Deputy District Attorney; Jim Nichols, County Manager; Kathy Lewis, Clerk-Treasurer; Carl Ruschmeyer, Public Works Director; Lisa Granahan, Economic Vitality Manager; Nick Charles, Civil Engineer III; Erik Nilssen, County Engineer; Vicki Moore; Accountant; Vicky Derner, Chief Deputy Clerk; Laure Penny, Clerk to the Board and Tammy Davis, Senior Secretary.

**INVOCATION**

Not held.

**PLEDGE OF ALLEGIANCE**

Steve Thaler led the Pledge of Allegiance.

**PUBLIC COMMENT**

No public comment.

**1. For presentation only. The North Valley Wastewater Treatment Facility Capacity Study and Estimated System Capacity Findings. (Nick Charles)**

Nick Charles, Civil Engineer III, provided a background on why we are here. He stated a couple of years ago they were having continuous problems keeping up on the plant. We are at an 85% capacity right now with existing customers. The State mandated a capacity analysis. Staff discussed what the options were if we are that close to capacity. Today's work session is a review of current conditions and staff will be coming back at a later date to discuss some options to fix the situation.

Mr. Charles explained what wastewater is. It is waste carried away by water from residences and other establishments. Each place has its own unique character of wastewater. Douglas County does not have storm water going into the system at this time. He then discussed why we treat wastewater. There are two reasons; to protect human health and the environment. The constituents of concern for wastewater are physical, chemical and biological. He went on to explain the wastewater process. Production, when it leaves the tap; Collection, transmit waterborne waste; Treatment,

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varying levels and Discharge, liquid and solids. Douglas County has a coupled activated sludge system. Three components to activated sludge are suspended & aerated microorganisms; liquid/solid separation; and recycle system. Mr. Charles provided a diagram of how the treatment works (Preliminary; Primary, Secondary and Solids) and then some detailed information on each treatment process along with samples of water from the different processes. At this time Douglas County stores its solid disposal and has to call in a company to clean. Carl Ruschmeyer, Public Works Director, commented they did a cleaning in 2007. Mr. Charles commented the cleaning costs are between \$150 and \$200 thousand.

Vice Chairwoman McDermid asked Mr. Charles what Tertiary treatment was. Mr. Charles responded it's an additional treatment beyond Secondary.

Mr. Charles explained Effluent Disposal. The process is to reuse the water and the purpose is to dispose of treated wastewater. During the winter the effluent ponds fill up and then in the spring and summer Bently uses it to water.

Commissioner Thaler asked about evaporation. Mr. Charles responded evaporation is huge.

Mr. Charles discussed the Non-Capacity Deficiencies. Right now Douglas County is missing grit removal; we are over circulating which causes higher operational costs and we have little to no process redundancy along with any solids handling which is very costly and difficult to remove when required. Vice Chairwoman McDermid asked if there was any advantage to going from Secondary treatment to Tertiary treatment. Mr. Charles responded that is driven by regulatory requirements and at this time Douglas County doesn't have any requirements driving it in that direction.

The contract with Bently for using the effluent disposal was discussed. Mr. Ruschmeyer explained we receive a small administrative fee and that the contract is for 50 years.

Mr. Charles moved on to discuss Capacity. He explained that right now all the wastewater from the Topsy Lane area goes to Carson City because we don't have the capacity to take it. We pay Carson City to treat the water.

Commissioner Penzel asked what percentage of our intake was industrial. Mr. Charles responded industrial is all over the board so it was hard to tell what the percentage was.

Mr. Charles explained that CH2M Hill was hired to complete a capacity analysis; analyze growth/increased flows and evaluate future treatment/expansion alternatives. He then discussed the Capacity Analysis. He stated CH2M believes that

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the plant should be considered to be functioning at or very near its maximum capacity under current conditions. Our capacity right now is 10 times more than it was in 1987.

Mr. Charles explained the Future Flows. North County (Topsy Lane area) will continue to go to Carson City. However that cost will continue to increase and could reach \$178,000 by FY19. Eventually there will be septic tank conversions and population growth.

Mr. Charles went over the Assumptions. Diverting North County to the North Valley Wastewater Treatment Plant and converting 750 septic tanks starting in 2021. This lead to Future Conditions. There could be a deficiency by 2035. Mr. Charles also read a quote from the CH2M Analysis Report *"...the [model] results provide valuable information as to the general range of the plant capacity but should not be taken as a simple 'line in the sand' indicator of capacity. This is to say that there are real scenarios that may occur under current conditions that would exceed the plant capacity."*

Mr. Charles then provided a summary. Serious deficiencies exist in the current plant; little to no redundancy in existing plan; limited to no growth capacity is available and increasing treatment costs in North County. And what's next? Finish alternative evaluation with CH2M Hill; evaluate funding and implementation options and present implementation plan to the Board.

**CLOSING PUBLIC COMMENT**

No public comment.

There being no further business to come before the Board, the meeting adjourned at 1:02 p.m.

Respectfully submitted:

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Doug N. Johnson, Chairman  
Douglas County Board of Commissioners

ATTEST:

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Kathy Lewis, Clerk-Treasurer

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